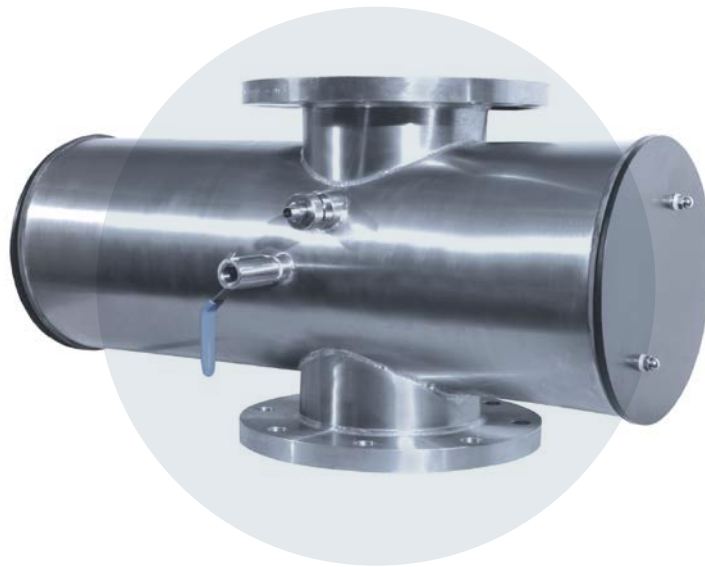


We UVCare...

Application Optimised UV for Drinking Water



PROLINE PQ IL



Validated UV treatment
for drinking water

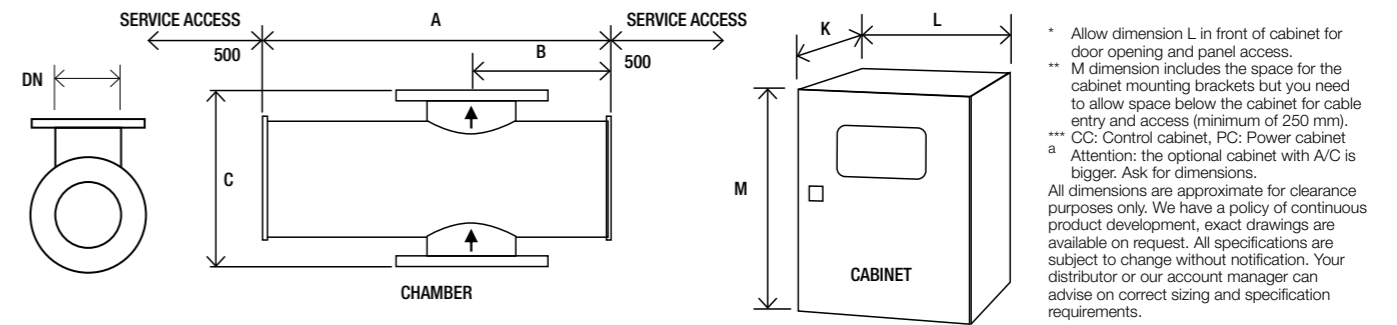
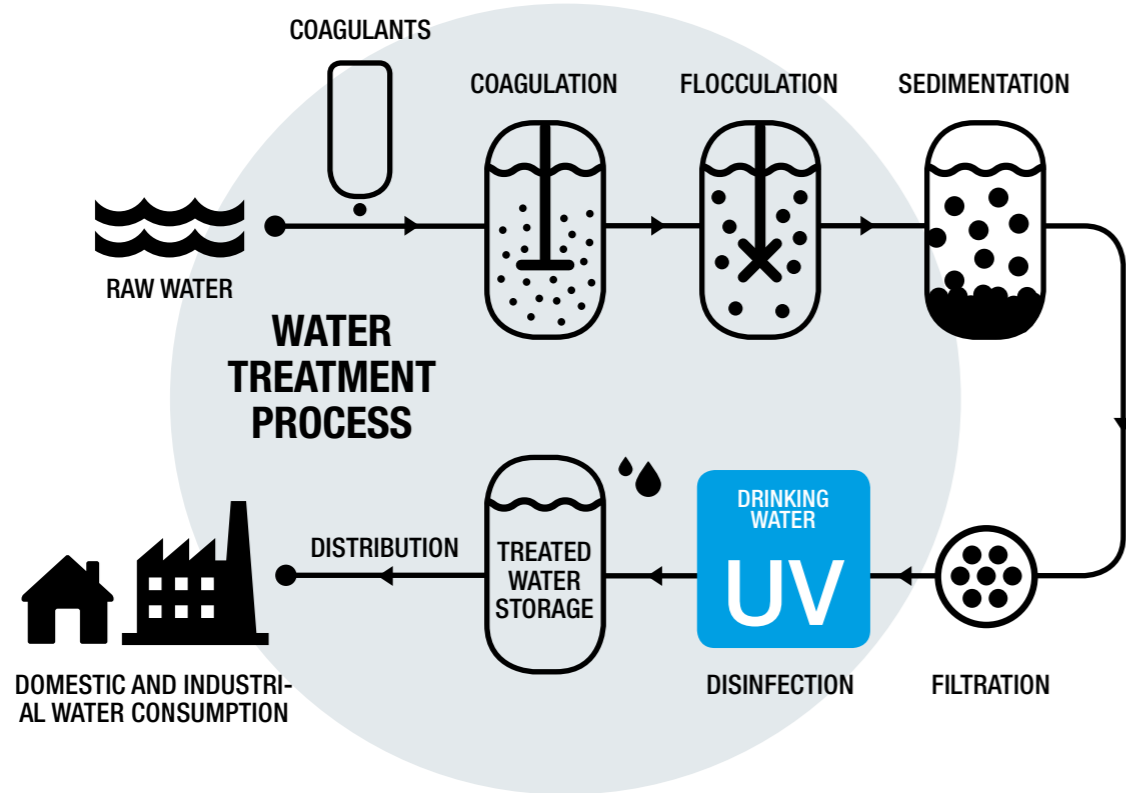
Our ProLine PQ IL systems are aimed specifically at providing third party validated UV disinfection for municipal drinking water. By using a third party validated UV system you can be certain that the UV dose being produced will disinfect the water, eliminate harmful micro-organisms, reduce the bio-burden, protect against bio-fouling and lower operating costs. Each system comes with a certified dry UV sensor allowing checking of UV performance. The UV sensor measures the germicidal output of the UV system and a UV dose read out makes it easy to monitor and log performance. The control system also has the ability to take flow and transmittance meter inputs and calculate the UV dose based on real time operating conditions.

berson

hanovia

aquionics

ProLine PQ IL™ drinking water treatment process



Model Number	Max. power (kW)	No of lamps	Dimensions (mm)				DN	Cabinet (fan cooled) ^a			Approx weight (Kg)	
			Chamber A	Chamber B	Chamber C	Cab. No ^{***}		Cabinet K*	Cabinet L	Cabinet M**	Chamber Empty	Cabinet Fan cooled
ProLine PQ IL 450	5.6	2	780	310	400	200	1	300	1000	1200	78	80
ProLine PQ IL 1000	11	4	780	310	400	200	1	300	1000	1200	78	100
ProLine PQ IL 4000	17.5	4	896	368	550	350	1	600	1000	2100	150	180
ProLine PQ IL 4500	26	6	896	368	550	350	1	600	1000	2100	150	200
ProLine PQ IL 12000	39	6	1052	446	680	500	1 CC	400	600	2000	240	130
							1 PC	600	1200	2100		260
ProLine PQ IL 14000	52	8	1052	446	680	500	1 CC	400	600	2000	240	130
							1 PC	600	1200	2100		290

UV CHAMBER	
Material:	StSt 316L / 1.4404
Internal finish:	< 0.8 µm Ra, welds as laid, electropolished and passivated
External finish:	Brushed to K280, electropolished and passivated
Process (mating) connections:	Flange EN 1092-1 PN10
Drain connection:	BSP socket
End plate:	Removable end plate
Degree of protection:	IP54 equivalent to NEMA 12
Wiper:	Automatic (electrically driven)
Arc tube (lamp):	Medium pressure
Arc tube enclosure:	Doped quartz
Number of arc tubes (lamps):	See table above
Expected lamp life:	9000 hours
Temperature sensor:	Yes
UV sensor:	Dry DVGW compliant UV sensor (one per lamp)
Working fluid temperature:	1°C to 60°C
Hydrostatically pressure tested:	Yes
Chamber mounting:	Flow horizontal or vertical (lamps horizontal only)
Operating pressure:	6 bar
Seals:	EPDM, ADI free, EC 1935/2004, FDA 21 CFR 177.2600 approved

CABINET (FAN COOLED)	
Material:	Polyester coated carbon steel, RAL 7035
Degree of protection:	IP54 (NEMA 12)
Supply voltages:	PQ IL 450-1000: 200-277 V (2ph L1,L2 or 1ph L1+N) PQ IL 4000-14000: 400-480 V (3ph L1, L2, L3) 50/60 Hz (voltage tolerance ±10% of nominal)
Operating temperature range:	5°C to 35°C
Relative humidity:	<95% non-condensing
Cooling fans:	Yes
Interconnecting cable:	10 m
Variable power:	Stepless variable power (70% reduction from maximum ballast power)

HMI / CONTROL	
Display:	4 line LCD, indicating system status including alarms
Operating menu:	3 levels (2 with password protection)
Fault finding:	Event log

CUSTOMER OUTPUTS	
4-20 mA passive output:	UV dose, UV intensity, ballast power
VFC outputs:	Standby in remote, system standby, system cooling down, any trip, any warning, UV dose failure, system ready, wiper failure, lamp failure, water leak, water temperature warning, Full water detection, water & cabinet temperature alarm

CUSTOMER INPUTS	
4-20 mA active or passive inputs:	Flow meter and UVT transmittance meter
VFC inputs:	Remote stop/start, remote clear message, remote wipe, remote set power high

CUSTOMER COMMUNICATIONS PORT	
Modbus RS 485 serial RTU for SCADA connection	

APPROVALS	
CE marked, UL 508A shop, USEPA tested to UVDGM	

KEY FEATURES	WHAT IT GIVES YOU	BENEFITS FOR YOU
INTELLIGENCE		
Dry DVGW approved UV sensor measuring germicidal wavelengths	Continuous verification of performance with real time RED dose reading and in-built low dose warning	Easy to monitor and log system performance
Flow and UV transmittance (UVT) meter inputs	Dose reading based on actual process conditions when meters are connected	Accurate UV dose reading guaranteed under wide range of operating conditions
OPTIMISATION		
Third party validated UV systems tested in accordance with the USEPA UV Disinfection Guidance Manual	UV system dose equations and sizing have been independently derived	Confidence the system will perform as stated
UV water disinfection	Protects your drinking water from microbiological contamination including chlorine resistant <i>Cryptosporidium</i> and <i>Giardia</i>	Does not affect taste and odour No chemicals
Designed for the treatment of drinking water	FDA-approved materials used for all wetted parts	Industry compliant materials
	Flanged connections, high standard internal finish	Designed to international standards
	Automatic wiper (quartz cleaning)	Self cleaning to maintain performance
INTEGRATION		
Compact design	Can be retrofitted to existing process	Easy integration

OPTIONS	
Document Support Pack	
Cabinet material: Stainless steel 304 or 316 with sloping roof	
Operation and Maintenance manual and printed Installation and Commissioning manual in Chinese, English, French, German & Spanish	
Flange options: PN16, ANSI 150, JIS, Table 'E'	
Lead length: 20 and 29 m	
In-field UV reference sensor kit	
Bleed: valve with BSP connection	
Control cabinet: Air conditioning in stainless steel raises control ambient limit to 50°C (in shade) IP rating 65 (NEMA 4X)	
Water leak detection: Detects water leaks from quartz sleeve	
Water level sensor: UV chamber full water detection	
Operating pressure: 10 Bar	
Aggressive water package: For 400 ppm to 20000 ppm chloride water	



PROLINE PQ IL

Also available in our Drinking Water product range...



PROLINE PQ AF

Small community, low energy amalgam range with USEPA validation.



PROLINE PQ AL

Small to mid-sized community, low energy multi-lamp amalgam range with USEPA validation and built in UVT compensation



PROLINE PQ EO

Energy Optimised medium pressure range, USEPA validated with built in UVT compensation



PROLINE PQ IL DVGW

Compact medium pressure range with DVGW certification, for use where space is tight in small to mid-sized communities



www.weuvcare.com

BERSON, HANOVIA & AQUIONICS WORKING TOGETHER AS PART OF THE HALMA GROUP.

Netherlands

t: +31 40 2907777
e: sales@bersonuv.com

China

t: +86 21 61679599
e: china@hanovia.com

USA

t: +1 980 256 5700
e: sales@aquionics.com

Germany

t: +49 611 44575375
e: verkauf@hanovia.com

Malaysia

t: +60 16 440 8834
e: asia@hanovia.com

Canada

t: +1 980.256.5700
e: sales@aquionics.com

United Kingdom

t: +44 1753 515300
e: sales@hanovia.com

Mexico

t: +1 980.256.5700
e: sales@aquionics.com